

EXECUTIVE SUMMARY

At the invitation of the Government of Mexico the IAEA conducted a SALTO (Safety Aspects of Long Term Operation) mission at Laguna Verde Nuclear Power Plant (NPP) from 5 March to 14 March 2019.

Comision Federal de Electricidad (CFE) is a public utility which is owned by the Federal State. The operating licence of Laguna Verde Nuclear Power Station will expire, respectively for Unit 1 and Unit 2, on July 24, 2020 and on April 10, 2025.

The SALTO mission focused on the status of activities related to Long Term Operation (LTO) of the plant. The review team consisted of two IAEA staff members (Team Leader, Deputy Team Leader), six international experts and four international observers, covering all six areas of the standard scope of a SALTO mission.

The team reviewed the completed, in-progress and planned activities related to LTO, including Ageing Management (AM) of the Systems, Structures and Components (SSCs) important to safety and revalidation of Time-Limited Ageing Analyses (TLAAs).

Through the review of available documents, presentations and discussions with counterparts and other members of the plant staff, the IAEA team assessed the progress in the field of ageing management and preparedness for safe long-term operation. The plant's LTO activities address most of the topics recommended by the IAEA, some activities are completed, and some are still being implemented.

The team found the plant staff to be professional, open and receptive to suggestions for improvement. Walk-downs showed that the plant is well maintained. The team concluded that the plant management is committed to improving plant preparedness for LTO.

In addition, the team found several good performances, including the following:

- A user-friendly database to effectively manage plant technical documentation to support LTO;
- Monitoring system on fire water pumps to help early detection of leakages;
- An effective programme to transfer critical knowledge from employees leaving the plant within 5 years.

The team found areas which should be improved to reach the level of IAEA Safety Standards and international good practices. Fourteen issues were noted:

- The plant does not possess a comprehensive LTO implementation programme;
- Periodic Safety Review (PSR) is not comprehensive to identify potential safety improvements for LTO;
- The Final Safety Analysis Report has not been updated for LTO;
- The design modifications management process does not ensure update of all plant documentation in a timely manner;
- Process and documentation for scoping is inadequate;
- Ageing management programmes and ageing management review for active components are not comprehensive for LTO;
- Data management processes are not adequate to support ageing management;
- Ageing management review (AMR) is not supported by a condition assessment of all in-scope SCs;

- Development and implementation of the AMPs for mechanical components is not finalised;
- The equipment qualification programme is not comprehensive for LTO;
- A proactive technological obsolescence programme is not fully implemented;
- The plant has not completed a comprehensive ageing management review for civil SCs for LTO;
- The plant has not completed the development and implementation of the ageing management programmes for civil SCs for LTO;
- The plant has not finalised the process for ensuring plant personnel knowledge and competences related to ageing management activities.

A summary of the results was presented to the plant management during the exit meeting held on 14 March 2019. The plant management expressed a determination to address the areas identified for improvement and indicated their intent to invite a ‘SALTO follow-up Safety Review Mission’ to Laguna Verde Nuclear Power Plant in May 2021.